

### Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Claims 1-6 (Canceled)

7. (Currently amended) The monoclonal antibody of claim + 33, wherein the antibody is in a form of scFv.

8. (Currently amended) The monoclonal antibody of claim + 33, wherein the antibody is in a form of Fab.

9. (Currently amended) The monoclonal antibody of claim + 33, wherein the antibody is in a form of fully assembled antibody.

Claims 10-12 (Canceled)

13. (Withdrawn) A monoclonal antibody that specifically binds to a human VEGF and has V<sub>L</sub> comprising the amino acid sequence of  
X<sub>1</sub>X<sub>2</sub>X<sub>3</sub>X<sub>4</sub>TQX<sub>5</sub>PSX<sub>6</sub>X<sub>7</sub>SX<sub>8</sub>X<sub>9</sub>X<sub>10</sub>GX<sub>11</sub>X<sub>12</sub>X<sub>13</sub>X<sub>14</sub>IX<sub>15</sub>CX<sub>16</sub>X<sub>17</sub>SX<sub>18</sub>X<sub>19</sub>IX<sub>20</sub>X<sub>21</sub>X<sub>22</sub>X<sub>23</sub>X<sub>24</sub>WYQQX<sub>25</sub>PGX<sub>26</sub>APX<sub>27</sub>X<sub>28</sub>LX<sub>29</sub>YX<sub>30</sub>X<sub>31</sub>X<sub>32</sub>X<sub>33</sub>LX<sub>34</sub>X<sub>35</sub>GVX<sub>36</sub>X<sub>37</sub>RFSGX<sub>38</sub>X<sub>39</sub>SGTDFX<sub>40</sub>LTIX<sub>41</sub>X<sub>42</sub>LQX<sub>43</sub>X<sub>44</sub>DX<sub>45</sub>AX<sub>46</sub>YYCQQX<sub>47</sub>X<sub>48</sub>X<sub>49</sub>X<sub>50</sub>PX<sub>51</sub>TFGX<sub>52</sub>GTKX<sub>53</sub>X<sub>54</sub>IK, wherein the underlined regions are designated as V<sub>L</sub>/CDR1, V<sub>L</sub>/CDR2, and V<sub>L</sub>/CDR3, respectively, whereas the rest of the region is designated as framework, and wherein X<sub>1</sub> is D, E or A; X<sub>2</sub> is I, or T; X<sub>3</sub> is V, E, K, R, Q, or T; X<sub>4</sub> is M, or L; X<sub>5</sub> is S, or T; X<sub>6</sub> is S, or T; X<sub>7</sub> is L, or V; X<sub>8</sub> is A, or V; X<sub>9</sub> is S, or T; X<sub>10</sub> is P, V, L, A, or I; X<sub>11</sub> is E, or D; X<sub>12</sub> is R, or T; X<sub>13</sub> is A, or V; X<sub>14</sub> is T, or A; X<sub>15</sub> is T, S, or A; X<sub>16</sub> is S, R, N, K, H, or Q; X<sub>17</sub> is A, or S; X<sub>18</sub> is Q, or R; X<sub>19</sub> is S, D, A, or P; X<sub>20</sub> is S, G, R, T, or Y; X<sub>21</sub> is T, N, S, D, or K; X<sub>22</sub> is Y, or D; X<sub>23</sub> is L, or I; X<sub>24</sub> is A, N, or T; X<sub>25</sub> is K, or I; X<sub>26</sub> is Q, K, T, or I; X<sub>27</sub> is R, K, Q, N, H, S, or E; X<sub>28</sub> is V, or L; X<sub>29</sub> is I, or V; X<sub>30</sub> is F, A, G, D, or S; X<sub>31</sub> is A, or T; X<sub>32</sub> is S, or T; X<sub>33</sub> is N, S, R, or T; X<sub>34</sub> is A, H, or Q; X<sub>35</sub> is S, or G; X<sub>36</sub> is P, T; X<sub>37</sub> is S, N, D, G, or Y; X<sub>38</sub> is S, or T; X<sub>39</sub> is G, or R; X<sub>40</sub> is T, or A; X<sub>41</sub> is S, or R; X<sub>42</sub> is S, or R; X<sub>43</sub> is P, or A;

X<sub>44</sub> is E , or D; X<sub>45</sub> is F, V, or S; X<sub>46</sub> is V, T, I , A , or S; X<sub>47</sub> is Y, or S; X<sub>48</sub> is S, Y, or N; X<sub>49</sub> is S , or T; X<sub>50</sub> is T, V, A, P, K, G, S, or I; X<sub>51</sub> is W , or Y; X<sub>52</sub> is Q , or G; X<sub>53</sub> is V, or L; and X<sub>54</sub> is E, D , or A.

14. (Withdrawn) A monoclonal antibody that specifically binds to a human VEGF and has V<sub>L</sub> comprising the amino acid sequence of

X<sub>1</sub>X<sub>2</sub>X<sub>3</sub>LTQPPSX<sub>4</sub>SX<sub>5</sub>TPGQX<sub>6</sub>VTISCSGX<sub>7</sub>X<sub>8</sub>SNX<sub>9</sub>GX<sub>10</sub>NX<sub>11</sub>VX<sub>12</sub>WYQQX<sub>13</sub>PGX<sub>14</sub>APKX<sub>15</sub>LX<sub>16</sub>YX<sub>17</sub>NX<sub>18</sub>X<sub>19</sub>RPSGVPX<sub>20</sub>RX<sub>21</sub>SGSX<sub>22</sub>SX<sub>23</sub>TSASLAISGLX<sub>24</sub>SEDEADYYCX<sub>25</sub>X<sub>26</sub>WDDSLX<sub>27</sub>GYVFGX<sub>28</sub>GTX<sub>29</sub>LTVL, wherein the underlined regions are designated as V<sub>L</sub>/CDR1, V<sub>L</sub>/CDR2, and V<sub>L</sub>/CDR3, respectively, whereas the rest of the region is designated as framework, and wherein X<sub>1</sub> is Q L, or N; X<sub>2</sub> is P A F, or S; X<sub>3</sub> is V, or M; X<sub>4</sub> is A, or T; X<sub>5</sub> is G, or A; X<sub>6</sub> is R, or S; X<sub>7</sub> is S, or T; X<sub>8</sub> is S, T Y, or N; X<sub>9</sub> is I , or V; X<sub>10</sub> is S, or R; X<sub>11</sub> is S, P, N, A, or T; X<sub>12</sub> is N, T , or Y; X<sub>13</sub> is L, or F; X<sub>14</sub> is T, or A; X<sub>15</sub> is V, L, or F; X<sub>16</sub> is M, or I; X<sub>17</sub> is G, T, or S; X<sub>18</sub> is N, or D; X<sub>19</sub> is Q, or E; X<sub>20</sub> is D, or E; X<sub>21</sub> is F, or L; X<sub>22</sub> is K, or R; X<sub>23</sub> is G, or A; X<sub>24</sub> is Q, L, or R; X<sub>25</sub> is A, or G; X<sub>26</sub> is A, S, or T; X<sub>27</sub> is N, S, or T; X<sub>28</sub> is T, or A; and X<sub>29</sub> is K, or Q.

15. (Withdrawn) A monoclonal antibody that specifically binds to a human VEGF and has V<sub>L</sub> comprising the amino acid sequence of

QSALTQPPSVSGAPGQRVTISCTGRSSNIGAGHDVHWYQQLPGTAPKLLIYANDQRPSGVPDRFSDSKSGTSASLGISGLRSEDEADYFCATWDDSLHGYVFGTGTKVTVL (SEQ ID No: 54).

16. (Withdrawn) A monoclonal antibody is provided that specifically binds to a human VEGF and has V<sub>H</sub> comprising the amino acid sequence of

X<sub>1</sub>X<sub>2</sub>QLVX<sub>3</sub>SGGGX<sub>4</sub>VQPGGX<sub>5</sub>LRLX<sub>6</sub>CAX<sub>7</sub>SGX<sub>8</sub>X<sub>9</sub>X<sub>10</sub>X<sub>11</sub>X<sub>12</sub>X<sub>13</sub>GX<sub>14</sub>NWX<sub>15</sub>RQAPGKGX<sub>16</sub>EWVGWX<sub>17</sub>NTX<sub>18</sub>X<sub>19</sub>GX<sub>20</sub>X<sub>21</sub>TYX<sub>22</sub>X<sub>23</sub>X<sub>24</sub>FX<sub>25</sub>RRX<sub>26</sub>TX<sub>27</sub>SX<sub>28</sub>X<sub>29</sub>X<sub>30</sub>SKX<sub>31</sub>X<sub>32</sub>X<sub>33</sub>YLQX<sub>34</sub>NSLRAEDTAVYYCAX<sub>35</sub>YPX<sub>36</sub>YYGX<sub>37</sub>SHWYFDVWX<sub>38</sub>QGTLVTVSS, wherein the underlined regions are designated as CDR1, CDR2, and CDR3, respectively, whereas the rest of the region is designated as framework according to Kabat nomenclature, and wherein X<sub>1</sub> is E, or Q; X<sub>2</sub> is V, or G; X<sub>3</sub> is Q, or E; X<sub>4</sub> is V, or L; X<sub>5</sub> is S, or T; X<sub>6</sub> is S T, or R; X<sub>7</sub> is A, or V; X<sub>8</sub> is Y, or F; X<sub>9</sub> is T, D, N, S, or A; X<sub>10</sub> is F, or L; X<sub>11</sub> is T, D, Y, A, S, or N; X<sub>12</sub> is N, H, or S; X<sub>13</sub> is Y, or F; X<sub>14</sub> is M, L, I,

or V; X<sub>15</sub> is I, V, or L; X<sub>16</sub> is L, or P; X<sub>17</sub> is I, or V; X<sub>18</sub> is Y, or N; X<sub>19</sub> is T, or N; X<sub>20</sub> is E, or A; X<sub>21</sub> is P, T, or S; X<sub>22</sub> is A, or V; X<sub>23</sub> is A, H, Q, P, D, or E; X<sub>24</sub> is D, or E; X<sub>25</sub> is K, or T; X<sub>26</sub> is V, F, or L; X<sub>27</sub> is F, or I; X<sub>28</sub> is L, or R; X<sub>29</sub> is D, or N; X<sub>30</sub> is T, or N; X<sub>31</sub> is S, or N; X<sub>32</sub> is T, Q, P, or K; X<sub>33</sub> is A, V, or P; X<sub>34</sub> is L, or M; X<sub>35</sub> is K, or R; X<sub>36</sub> is H, or Y; X<sub>37</sub> is S, R, or T; and X<sub>38</sub> is G, or A.

17. (Withdrawn) A monoclonal antibody is provided that specifically binds to a human VEGF and has V<sub>L</sub> comprising the amino acid sequence selected from the group consisting of SEQ ID NOs:2-54, more preferably comprising the amino acid sequence selected from the group consisting of SEQ ID NO:14, SEQ ID NO:26, SEQ ID NO:28, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:44, SEQ ID NO:47, and SEQ ID NO:54.

18. (Withdrawn) A monoclonal antibody that specifically binds to a human VEGF and has V<sub>H</sub> comprising the amino acid sequence selected from the group consisting of SEQ ID NOs:57-110 and SEQ ID NOs:285-310, and preferably comprising the amino acid sequence selected from the group consisting of SEQ ID NOs:61-64, SEQ ID NO:67, 68, 70, 75, 83, 88, 89, 90, 91, 92, 93, 94, and 96-110.

19. (Withdrawn) A monoclonal antibody is provided that specifically binds to a human VEGF and has CDR2 in the V<sub>L</sub> region (V<sub>L</sub>/CDR2) comprising the amino acid sequence selected from the group consisting of SEQ ID NOs:195-209.

20. (Withdrawn) A monoclonal antibody that specifically binds to a human VEGF and has CDR3 in the V<sub>L</sub> region (V<sub>L</sub>/CDR3) comprising the amino acid sequence selected from the group consisting of SEQ ID NOs:210-228.

21. (Withdrawn) A monoclonal antibody that specifically binds to a human VEGF and has a framework region (FR) CDR3 in the V<sub>L</sub> region (V<sub>L</sub>/FR) comprising the amino acid sequence selected from the group consisting of: SEQ ID NO:229-269, and preferably comprising the amino

acid sequence selected from the group consisting of SEQ ID NO:232, 235, 237, 251, 255, 263, and 265.

22. (Withdrawn) A monoclonal antibody that specifically binds to a human VEGF and has CDR1 in the  $V_H$  region ( $V_H$ /CDR1) comprising the amino acid sequence of  $GX_1X_2X_3X_4X_5X_6GX_7N$ , wherein  $X_1$  is Y, or F;  $X_2$  is D, N, T, S, or A;  $X_3$  is F, or L;  $X_4$  is T, D, S, Y, A, or N;  $X_5$  is H, N, or S;  $X_6$  is Y, or F;  $X_7$  is M, L, I, or V.

23. (Withdrawn) A monoclonal antibody that specifically binds to a human VEGF and has CDR2 in the  $V_H$  region ( $V_H$ /CDR2) comprising the amino acid sequence of  $WX_1NTX_2X_3GEX_4TYX_5X_6X_7FX_8R$ , wherein  $X_1$  is I, or V;  $X_2$  is Y, or N;  $X_3$  is T, or N;  $X_4$  is P, T, or S;  $X_5$  is A, or V;  $X_6$  is A, Q, P, H, D, or E;  $X_7$  is D, or E; and  $X_8$  is K, or T.

24. (Withdrawn) A monoclonal antibody that specifically binds to a human VEGF and has CDR2 in the  $V_H$  region ( $V_H$ /CDR2) comprising the amino acid sequence selected from the group consisting of: SEQ ID NOs:136-156.

25. (Withdrawn) A monoclonal antibody that specifically binds to a human VEGF and has CDR3 in the  $V_H$  region ( $V_H$ /CDR3) comprising the amino acid sequence of  $KYPX_1YYGX_2SHWYFDV$ , wherein  $X_1$  is Y, or H, and  $X_2$  is R.

26. (Withdrawn) A monoclonal antibody that specifically binds to a human VEGF and has CDR3 in the  $V_H$  region ( $V_H$ /CDR3) comprising the amino acid sequence selected from the group consisting of SEQ ID NOs:311-337.

27. (Withdrawn) A monoclonal antibody that specifically binds to a human VEGF and has FR in the  $V_H$  region ( $V_H$ /FR) comprising the amino acid sequence of  $X_1VQLVX_2SGGGX_3VQPGGX_4LRLX_5CAX_6S/CDR1/WX_7RQAPGKGLEWVG/CDR2/RX_8TX_9S$   
 $X_{10}DX_{11}SKX_{12}X_{13}X_{14}YLQX_{15}NSLRAEDTAVYYCA/CDR3/WX_{16}QGTLVTVSS$ , wherein  $X_1$  is E, or Q;  $X_2$  is Q, or E;  $X_3$  is V, or L;  $X_4$  is S, or T;  $X_5$  is S, T, or R;  $X_6$  is A, or V;  $X_7$  is I, or V;  $X_8$

is F, or V; X<sub>9</sub> is F, or I; X<sub>10</sub> is L, or R; X<sub>11</sub> is T, or N; X<sub>12</sub> is S, or N; X<sub>13</sub> is T, Q, or K; X<sub>14</sub> is A, or V; X<sub>15</sub> is M, or L; and X<sub>16</sub> is G, or A.

28. (Previously Presented) A monoclonal antibody that specifically binds to a human VEGF and has a V<sub>L</sub> and V<sub>H</sub> pair selected from the group consisting of: SEQ ID NO:28 and 88; SEQ ID NO:28 and 90; SEQ ID NO:28 and 91; SEQ ID NO:28 and 106; SEQ ID NO:28 and 107; SEQ ID NO:28 and 108; and SEQ ID NO:28 and 109.

29. (Withdrawn) The monoclonal antibody of any of claims 14-29, wherein the antibody has dissociation constant K<sub>d</sub> equal to or lower than 10 nM.

30. (Withdrawn) The monoclonal antibody of any of claims 14-29, wherein the antibody has dissociation constant K<sub>d</sub> equal to or lower than 1 nM.

31. (Withdrawn) The monoclonal antibody of any of claims 14-29, wherein the antibody has dissociation constant K<sub>d</sub> equal to or lower than 0.1 nM.

32. (Withdrawn) The monoclonal antibody of any of claims 14-29, wherein the antibody has dissociation constant K<sub>d</sub> equal to or lower than 0.01 nM.

33. (Previously presented) A monoclonal antibody that specifically binds to human VEGF and has a V<sub>L</sub> and V<sub>H</sub> pair selected from the group consisting of: SEQ ID NO:26 and 88; SEQ ID NO:26 and 90; SEQ ID NO:26 and 91; SEQ ID NO:26 and 106; SEQ ID NO:26 and 107; SEQ ID NO:26 and 108; SEQ ID NO:26 and 109; SEQ ID NO:28 and 88; SEQ ID NO:28 and 90; SEQ ID NO:28 and 91; SEQ ID NO:28 and 106; SEQ ID NO:28 and 107; SEQ ID NO:28 and 108; SEQ ID NO:28 and 109; SEQ ID NO:36 and 88; SEQ ID NO:36 and 90; SEQ ID NO:36 and 91; SEQ ID NO:36 and 106; SEQ ID NO:36 and 107; SEQ ID NO:36 and 108; and SEQ ID NO:36 and 109.

34. (Previously presented) A monoclonal antibody that specifically binds to human VEGF and has a VL and VH pair selected from the group consisting of: SEQ ID NO:26 and 106; SEQ ID NO:28 and 106; and SEQ ID NO:36 and 106.

35. (Previously presented) A monoclonal antibody that specifically binds to human VEGF and has a V<sub>L</sub> and V<sub>H</sub> pair consisting of SEQ ID NO:28 and 106.

36. (New) A monoclonal antibody that specifically binds to human VEGF and has a VL domain consisting of SEQ ID NO:28 in combination with a VL domain selected from SEQ ID NO: 106, SEQ ID NO: 107 and SEQ ID NO:108 SEQ ID NO: 109, SEQ ID NO: 88, SEQ ID NO: 90, and SEQ ID NO: 91 .

37. (New) The monoclonal antibody of claim 35, wherein the antibody is in a form of scFv.

38. (New) The monoclonal antibody of claim 35, wherein the antibody is in a form of Fab.

39. (New) The monoclonal antibody of claim 35, wherein the antibody is in a form of fully assembled antibody.

40. (New) A monoclonal antibody that specifically binds to a human VEGF and has a light chain variable domain comprising CDR1, CDR2 and CDR3 regions consisting of the amino acid sequences set forth in SEQ ID NO: 172, SEQ ID NO: 195 and SEQ ID NO: 212, respectively.

41. (New) The monoclonal antibody according to claim 40, wherein the heavy chain variable domain comprises CDR1, CDR2, and CDR3 regions consisting of the amino acid sequences set forth in SEQ ID NO: 31, SEQ ID NO: 152 and SEQ ID NO: 327, respectively.

42. (New) The monoclonal antibody of claim 41, wherein the antibody is in a form of scFv.

43. (New) The monoclonal antibody of claim 41, wherein the antibody is in a form of Fab.

44. (New) The monoclonal antibody of claim 41, wherein the antibody is in a form of fully assembled antibody.

45. (New) A monoclonal antibody that specifically binds to a human VEGF and has V<sub>L</sub> comprising CDR1, CDR2 and CDR3 regions consisting of the amino acid sequences set forth in SEQ ID NO: 170, SEQ ID NO: 195 and SEQ ID NO: 214, respectively.

46. (New) A monoclonal antibody that specifically binds to a human VEGF and has a heavy chain variable domain which comprises CDR1, CDR2, and CDR3 regions consisting of the amino acid sequences set forth in SEQ ID NO: 31, SEQ ID NO: 152 and SEQ ID NO: 327, respectively.

47. (New) A monoclonal antibody that specifically binds to a human VEGF and has V<sub>L</sub> comprising CDR1, CDR2 and CDR3 regions consisting of the amino acid sequences set forth in SEQ ID NO: 182, SEQ ID NO: 201 and SEQ ID NO: 222, respectively.

48. (New) An antibody heavy chain variable domain (VH) consisting of an amino acid sequence selected from SEQ ID NO: 88, SEQ ID NO: 90, SEQ ID NO: 91, SEQ ID NO: 106, SEQ ID NO: 107, SEQ ID NO: 108 and SEQ ID NO: 109.

49. (New) An antibody light chain variable domain (VL) consisting of an amino acid sequence selected from SEQ ID NO: 26, SEQ ID NO: 28, and SEQ ID NO: 36.